

REMARKS/ARGUMENTS

Favorable reconsideration of the present application is respectfully requested.

The non-elected Claims 1 and 2 have been canceled without prejudice to the filing of a divisional application directed thereto. Claims 5 and 13 have also been canceled. Claim 3 has been amended to introduce subject matter which is essentially based on that of canceled Claims 5 and 13, and recites that the control model represents a control system.

The Examiner has objected to Claims 3-13 under 35 U.S.C. § 112, first paragraph. Applicant respectfully submits that the specification indeed provides sufficient support for those skilled in the art to understand the nature of the claimed invention.

According to the non-limiting embodiment of the invention set forth beginning on page 5 of the specification, the invention can be applied to a clutch slip control apparatus, a CVT, or the like. Referring to the reference numbers used in the non-limiting embodiment, a slip control system 103 is composed of a plurality of models, each of which includes a group of parameters. For example, the parameters of the models can include those embodied in a parameter map 101 and have the values set forth for the parameters a11-b23 in Table 1. Phase delay or phase advancement models A1-D1 and A2-D2, as the models comprised of the parameters, include the parameters a11-b23 as set forth in the matrices shown at the bottom of page 6 in the specification. The phase delay models A1-D1 and phase advancement models A2-D2 can be used to express the slip control system 103 as set forth in equation 2 (page 6, line 17).

Thus, it is evident to those skilled in the art that the slip control system disclosed in the invention may be composed of phase delay and phase advancement models, which may include illustrated linear parameters which can be incorporated into a parameter map of the system in order to express the control system.

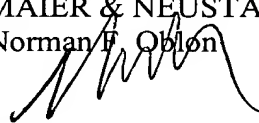
It is a feature of the invention that the parameters embodied in the parameter map 101 have weights or values which can be identified via reduced calculations. For example, as is set forth on page 8 (particularly equations 3-4), the first weight specifies the second weight, and so there is no need to independently specify the weights of all of the models, so that the amount of calculation required can be reduced. This has been reflected in the amended Claim 3, which is believed to be based upon adequate disclosure under 35 U.S.C. § 112, first paragraph.

Concerning the rejection under 35 U.S.C. § 101, the Examiner considers that the system of models basically consists of an empty set, e.g., where $D1=0$ and $D2=0$. However, Applicants respectfully submit that each of the models (e.g., the phase delay model, the phase advancement model, etc.) constituting the control mode is formed of a parameter group and not simply a single parameter as is suggested in the rejection. Thus, one cannot simply identify a single parameter having a zero value and conclude that the respective models comprise empty sets, since the product of the matrices will not necessarily have a zero value. This rejection is therefore traversed.

Applicants therefore believe that the present application is in a condition for allowance and respectfully solicit an early Notice of Allowability.

Respectfully submitted,

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